REPORT TO THE GOVERNOR ON THE IMPLEMENTATION OF
A Strategy for Improving the Financial, Technical and Managerial Capacity of Maine's Public Drinking Water Systems
AND PROGRESS ON IMPROVING PUBLIC WATER SYSTEM CAPACITY

to

Angus S. King, Jr.
Governor, State of Maine

by

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STATE OF MAINE
DEPARTMENT OF HUMAN SERVICES
Bureau of Health
Division of Health Engineering
Drinking Water Program

September 30, 2002

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The Honorable Angus S. King, Jr.
1 State House Station
Augusta, ME 04333-0001

Dear Governor King:

Enclosed is a report on the efficacy of Maine's Capacity Development Strategy (Strategy) and progress made toward improving the technical, managerial and financial capacity of Maine's public water systems. Section 1420(C)(3) of the Safe Drinking Water Act requires that a report must be issued to each state governor within two years of the adoption of a capacity development strategy, and every three years subsequently. Accordingly, this report examines the efficacy of *A Strategy for Improving the Financial, Technical and Managerial Capacity of Maine's Public Drinking Water Systems* through an analysis of the successes and difficulties of implementing the Strategy. The document also recounts efforts and progress made to improve the technical, managerial and financial operations of Maine's public water systems.

The Capacity Development Program within the Drinking Water Program of the Division of Health Engineering in the Bureau of Health, Department of Human Services is responsible for implementing the Strategy and engaging in efforts to generally improve public water system operations. Aside from the Capacity Development Program itself, many aspects of the Drinking Water Program's operations, as well as the operations of allied private sector organizations, touch on or fall under the broad mission of capacity development.

The goals of the Strategy are ambitious and broad. The capacity development activities of the Drinking Water Program and allied agencies are many and varied. This report is an effort to give a credible accounting for the effective implementation of the Strategy and to explain the efforts of drinking water organizations to enhance and improve public water system operations. If you have any questions please call Nancy Beardsley, the Director of the Maine Drinking Water Program

Respectfully submitted,

Kevin W. Concannon, Commissioner
Department of Human Services

Enclosure

TABLE OF CONTENTS

TABLES

Tables

APPENDICES

INTRODUCTION

The 1996 Amendments to the SDWA require each state's primacy agency to develop a Capacity Development Program (Program). The Department of Human Services' Drinking Water Program (DWP) is the primacy agency for the State of Maine. The DWP is tasked with the enforcement and administration of Federal and State rules and regulations that support the SDWA. Capacity development is the term for the broad goal of assisting public drinking water systems to improve their technical, managerial and financial (TMF) operations. Improvement in TMF operations aim to ensure that public water systems fully comply with the requirements of the SDWA, consistently produce safe drinking water, and make effective and efficient use of resources. To support each State's capacity development activities and to provide direction for those activities, each State was mandated to develop a strategy with the input and assistance of a committee of stakeholders, known as an advisory committee (AC). Based upon the recommendations of the AC, the DWP developed the Strategy with 11 goals to help improve the TMF operations of public water systems in Maine.

Capacity development encompasses many activities performed by the DWP and third party organizations involved in drinking water operations. A report that gives a substantial and credible accounting of the Strategy implementation and progress made toward improving the TMF operations of public water systems will be lengthy. This report is divided into three sections. The Executive Summary provides a quick review of the Strategy goals and of capacity-related activities. The body of the report covers the implementation of the Strategy and progress toward improving the capacity of drinking water systems.

EXECUTIVE SUMMARY

SYNOPSIS OF THE STRATEGY GOALS

To support each State's capacity development activities and to provide direction for those activities, each State was mandated to develop a strategy with the input and assistance of a committee of stakeholders, known as an advisory committee (AC). Based upon the recommendations of the AC, the DWP developed the Strategy with 11 goals to help improve the TMF operations of public water systems in Maine.

The goals outlined in the Strategy are the heart of the document and provide aims and directions for the Capacity Development Program. The overarching goal is to provide assistance to drinking water systems and to work toward building capacity among the regulated systems.

Enumerated Goals

1. Development of enhanced sanitary surveys.
2. Development of self-assessment tools for regulated drinking water systems.
3. Provide training for water system personnel in fiscal capacity and financial management.
4. Train Drinking Water Program staff in TMF elements.
5. Enforce water meter requirements.
6. Ensure that communities are considering Public Water System issues in community planning.
7. Provide early notification of rule changes.
8. Use third-party studies to show the benefits of, and encourage the development of, the consolidation of multiple drinking water systems into single entities.
9. Encourage cooperation among state agencies and between Federal, Tribal and local governments on drinking water issues.
10. Educate the public on TMF issues.
11. Make useful appropriation of financial and personnel resources to TMF assistance.

PROGRESS TOWARD IMPROVING THE TMF CAPACITY OF PUBLIC WATER SYSTEMS

The Drinking Water Program and private sector water agencies engage in activities that promote capacity development. Some of these activities occur wholly within the DWP, some occur exclusively within the private sector, and some are allied efforts of the DWP and the outside agencies. Two drinking water organizations most closely allied with the DWP, and partly subsidized under the Technical Assistance Set-aside of the Drinking Water State Revolving Fund (DWSRF), are the Maine Rural Water Association (MRWA) and the Maine Water Utilities Association (MWUA).

Within the DWP many sections and programs foster capacity development among the regulated public water systems through the execution of their normal duties. The DWP activities, outside of the Capacity Development Program, that most directly aid capacity development are:

- Operator Certification Program—supports technical and managerial capacity;
- Field Services—supports technical capacity;
- Source Water Protection—supports technical and managerial capacity;
- Drinking Water State Revolving Fund—supports technical capacity.

The Capacity Development Program is a two-track program aimed at improving TMF operations of existing water systems and assuring the TMF capacity of proposed water systems. Capacity Development activities for existing systems include:

- DWSRF reviews—before capital loans are approved, applicants must undergo a capacity review to assure the systems possess adequate capacity.
    - *25 Capacity reviews have been conducted since the start in May 2001. 24 were approved and 1 unapproved.*

- Capacity Development Grants—grant money is available for the preparation of planning and analysis documents for eligible water systems.
    - *In 1999 12 Comprehensive System Facilities Plans were approved.*
    - *Since the reactivation of the Capacity Development Grant Program in 2002, 13 Capacity Development Grant applications have been approved and 1 is under review.*
- Self-assessment surveys—analytical documents that serve as tools for water systems to assess their operations and for base line information.
- New System Permitting—all new community and non-transient, non-community water systems commencing operations after October 1, 1999 must receive a General Operations Permit before serving water.
    - *Since the establishment of New System Permitting, 6 General Operations Permits have been issued, 8 are under review, 2 are on hold, and 1 system withdrew when it opted for an interconnection to a water utility.*
- Training outreach—under development to provide education to water system personnel on a variety of topics to enhance TMF operations.

The DWP fully funds two Water Quality Specialist positions at the Maine Rural Water Association (MRWA) from the DWSRF 2% Technical Set-Aside. Commonly called Circuit Riders, the Specialists provide direct, on-site technical service and advice to small water systems. They also serve as a liaison between water systems and the DWP. These activities directly support technical and managerial capacity.

The Maine Water Utilities Association (MWUA) is an association of water systems allied to provide mutual aid through the sharing of information and resources. The DWP provides funds to the MWUA, also from the DWSRF 2% Technical Set-Aside, to provide for the education and training of water system personnel. These activities directly aid water systems in technical and managerial capacity, and to some extent, financial capacity.

CONCLUSION AND RECOMMENDATIONS

Strategy Implementation

Implementation of the Strategy will proceed at a varied pace for most of the goals. The role of capacity development in the near future will be split along three major lines of activity: DWSRF capacity reviews, new system permitting, and educational outreach. The Strategy goals that relate to these three activities are likely to be the ones to receive the quickest and most complete implementation. They will most directly complement and support the activities of the Capacity Development Program.

Progress Toward Improving TMF Capacity

The existing structures and activities detailed in the report that enable progress toward capacity development will remain as they are. These are natural organizational and active approaches that lend themselves well to enhancing capacity development. Likely, the only development in the near future that will alter this process to any degree will be the inclusion of more participants—individuals or organizations—in the process.

I. IMPLEMENTATION OF THE STRATEGY

STRATEGY GOALS[1]

Each goal is quoted directly from the Strategy with its corresponding number. A statement of the current status of implementation immediately follows under the heading of Current Status. The **Observations** provide some detail on the efficacy of the goal in supporting capacity development and in achieving its implementation.

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1. The DWP should develop and utilize an enhanced sanitary survey that will permit field staff to periodically collect TMF information about each of the State's regulated water systems, which can then be used to determine those systems most in need of TMF assistance

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Current Status

Beginning implementation.

Sanitary surveys for water districts, departments, utilities and companies were expanded in 2000 to include many of the needed TMF components. The surveys will be revamped again to include more coverage of financial and managerial areas. To date no modifications have been made to sanitary surveys for small Community, Non-Transient, Non-Community (NTNC) and Transient, Non-Community (TNC) water systems.

Observations

Elements from the *Capacity Development Technical, Financial and Managerial Self-Assessment Survey* mailed to PUC-regulated drinking water systems on April 8, 2002 will be extracted to be incorporated into the enhanced sanitary surveys that are routinely performed by DWP field staff.

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2. A self-assessment tool should be developed so that water systems can examine their capabilities and determine what type of assistance would provide the most benefit.

Current Status

A self-assessment tool, *Capacity Development Technical, managerial and financial Self-Assessment for Community Water Systems* (self-assessment tool or survey), directed to the PUC-regulated segment of the community water systems was developed and mailed on April 8, 2002. Of the 153 recipients of the mailing, 119 have responded as of the date of this report. Other non-regulated community water systems have not yet received a mailing.

Observations

The purpose of the self-assessment tool is three-fold:

1. "Assist systems in analyzing their operations for improvements and for potential planning and training;
2. Aid the DWP in establishing baseline data for systems throughout the State, and;
3. Provide a way to measure improvements through follow-up surveys."[2]

The first purpose appears to have the greatest value as a tool of self-analysis for system operators and managers. Some respondents stated that the exercise of reviewing and completing the survey provided a quick and useful analysis of their operations. Others said that the survey made them aware of issues that should be more central to their concerns rather than set aside as peripheral issues. Most likely, the DWP will have to glean information from answered questions to further identify potential needs for education and training.

The second purpose is perhaps the most difficult to achieve. The real challenge is extracting information from the respondents in a manageable way to establish baseline data. The foregoing challenge involves making baseline data understandable, useable and available for ready reference.

For the third purpose, the strategy envisioned that systems requesting assistance, or those identified by the DWP as needing assistance, would perform a preliminary analysis of their operations prior to receiving assistance. A second, follow-up survey a year after assistance is provided will identify improvements made. To date, no public water system has requested assistance.

The DWP will have to take the lead by encouraging water systems to complete a self-assessment. DWP office staff will quantify the results, identify the needy systems and encourage them to seek TMF assistance from capable providers, either DWP staff or contracted service providers.

Overall, the survey has been well received by the respondents. Ironically, whether or not a system responds to the survey may be a good predictor of the system's capacity. Those who have responded to the survey are more likely to possess capacity than those who haven't. Quick respondents may be more action-oriented and "on top of things," whereas the non-respondents appear to be more passive, less proactive and less inclined to value such a survey. Non-respondents may be ones in the greatest need of capacity development assistance and the ones of which the DWP is not readily aware.

3. Training should be provided to water system personnel in fiscal capacity and financial management.

Current Status

Not implemented.

No formal action has been taken to enact this goal. Various groups involved in training water system personnel have discussed proposals to provide fiscal capacity training but no training sessions on the subject have been finalized or emplaced.

Observations

The organizations that provide the bulk of the water operator training in the State of Maine include the Maine Rural Water Association (MRWA), the Maine Water Utilities Association (MWUA), the Joint Environmental Training Coordinating Committee (JETCC) and occasionally the Maine Drinking Water Program (DWP). The MRWA and the MWUA have the most experience in providing similar training and are best positioned to offer such training. These training organizations have identified other educational and training needs as more pressing concerns for water system personnel, but the organizations are considering financial training for future classes. Some of the water systems responding to the survey indicated that finance and accounting related classes are desired. Two water systems expressly requested training and education on the Maine PUC Chart of Accounts.

4. Training in technical, managerial, and financial capacity elements will be needed for drinking water program staff, contractors, consultants, and other service providers.

Current status

Partially implemented.

The Strategy envisioned this goal as one to be implemented over a period of time.

Observations

The DWP staff has engaged in a number of activities within the last four years that have increased the general awareness of capacity elements among the staff. These include:

- All Field Staff have attended Sanitary Survey training.
- Many staff members attend technical and managerial training seminars offered by training organizations.

- ❖ DWP staff persons frequently attend bimonthly meetings of the Maine Water Utilities Association where drinking water topics directly or tangentially related to capacity development are discussed and explored.
- ❖ Several staff persons serve on MWUA committees and provide input into training seminars and presentations.
- ❖ A number of the staff persons have successfully tested for and received water operator licenses.
- ❖ Staff persons receive training on new EPA rules and regulations.

A formal presentation to outside contractors, consultants, and others has not been made and may not be reasonable or effective. News articles appearing in *The Service Connection* and the Maine Water Utilities Association's *Journal* have covered capacity development subjects. These two publications are distributed to a wide audience of water systems, water system personnel, engineering firms and contractors. Other actions from the DWP office have increased awareness among the regulated water systems and professional firms of capacity development activities. Most recently, the reactivation of the Capacity Development Grant Program, and a direct mailing to eligible water systems and professional consulting firms notifying them of the Program's revival, have increased awareness of capacity development. The mailing of the self-assessment tool has further increased awareness of capacity development among the PUC-regulated systems.

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5. Water metering requirements already contained within Maine regulation should be enforced so that water systems know how much water they are using. The AC recommends meters at the treatment plant rather than individual meters.

Current status

Largely Implemented

The Maine Public Utilities Commission (PUC) oversees water-metering requirements. The PUC encourages the installation of master meters at the utility and individual water meters for all customers. Metering all services is very helpful for a utility to determine water losses and identify problem areas in the distribution system, but the expense associated with individual metering may be prohibitive for smaller water systems. The PUC will waive metering requirements for those systems where installation and service costs are deemed too high. Some systems remain on a flat user rate basis as rates for year round residents are kept low relative to the rates charged to seasonal users. Most of the PUC regulated utilities are nearly fully metered.

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6. The DWP should cooperate with boroughs, communities and cities to ensure that public water system capacity issues are actively considered during planning activities.

Current status

Partially implemented.

Through its regular mission actions the DWP has achieved some of this goal. As an effort to directly promote cooperative planning between municipalities and water producers, the goal has not been realized.

Observations

DWP actions that promote planning related to drinking water uses include:

- Source water protection maps. Each municipality has received a map detailing watersheds, aquifers, wells, source water intakes, etc. The maps are useful for planning for growth and development.
- Regulations controlling the placement and installation of underground storage tanks have assisted planning efforts toward safeguarding water sources.
- The DWP has made efforts to increase public awareness of drinking water concerns during Drinking Water Week and the Children's Water Festival.
- The Dept. of Inland Fisheries and Wildlife notifies the DWP of the location of new boat ramps and invites comment from the DWP on the appropriateness of the sites.

The goal is a lofty one, but implementing it will make demands on DWP staff time that would be more efficiently and better spent on other activities of direct benefit to drinking water providers. Rather, the DWP should support the efforts of water systems to cooperate more closely with their respective local municipalities in strategic planning for the future and working more closely with municipalities on common issues such as fire protection and emergency response. The DWP supports this approach through the Capacity Development Grant Program by offering grant money for Comprehensive Systems Facilities Plans (CSFPs) or strategic planning. The development of strategic plans encourages water systems and their respective municipalities to confer on planning.

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7. The DWP should enhance its efforts in providing early notice of impending rule changes or new regulatory requirements.

Current Status

Partially implemented.

DWP personnel realize that water systems often have a difficult time keeping current with proposed and impending rule changes. Public water systems whose primary business is the production and delivery of drinking water often are not fully aware of impending rule changes. Other public water systems that consider their drinking water operations ancillary to their primary business activities are often less aware of upcoming rule changes.

Observations

Currently, a series of workshops on the Public Notification Rule is slated to be held in the fall of 2002 in cooperation with the MRWA. In the fall of 2001 and the spring of 2002 a series of workshops educating surface water systems on the Disinfectant and Disinfection By-Products Rule, and the Long Term Interim Enhanced Surface Water Treatment Rule were held in concert with the MWUA. The DWP has had meetings with US Environmental Protection Agency (US EPA or EPA) personnel about materials and activities that the EPA could provide to small systems in northern New England for assistance. Items mentioned were "plain English" publications and posters notifying systems of rules and impending rule changes. The communication with EPA on this activity is still in the works. The DWP partnering with the MWUA and the MRWA provides one of the best venues for disseminating information. Articles in the *Service Connection* provide another way to reach the affected system.

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8. When feasible, the DWP should use third party, rather than governmental, studies to show that efficiencies can be gained through consolidation.

Current Status

Not implemented as stated.

This activity hasn't occurred as stated in the goal, but there is some movement and interest in consolidation as explained under the observations.

Observations

Encouraging regional water development efforts and consolidation of systems will be a challenging task likely to take place over a relatively long period of time because of the historic territoriality of Maine communities. Using third party studies to showcase the benefits of consolidation may not be very influential in changing attitudes for those resistant to the concept of consolidation. Even so, in areas of the state where developmental pressures are making demands on community services, land, and water sources, water suppliers are becoming aware of the benefits, or even the necessity of, consolidating systems operations or at least interconnecting

distribution mains. A group of five water systems in central Maine are conducting a "Mutual Aid/Interconnection" study for examining the engineering requirements for interconnecting distribution mains. The aim of the study, and any infrastructure project developing from it, is to have an interconnected system to provide backup water in emergency conditions should one of the subject systems experience a shortage or loss. The full interconnection project, if it goes forward, will not be a true consolidation, but will be the first step in an interconnected system. It may become the genesis for a consolidation in the future.

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9. The DWP should encourage cooperation among State agencies and between Federal, Tribal, and local levels of government on matters affecting drinking water systems at every reasonable opportunity.

Current Status

Implemented to a limited extent and ongoing.

The DWP has been in contact with officials at the Department of Education (DOE), the Department of Environmental Protection (DEP), the Maine Municipal Association (MMA), the Environmental Finance Center of the University of Southern Maine at the Edmund S. Muskie School of Public Service, and the Maine Emergency Management Agency (MEMA). The DWP also coordinates activities with the US EPA.

Observations

The cooperative organizational structure is such, that on issues facing drinking water, the DWP often serves as the hub of a wheel with spokes going out to a rim of allied agencies. These cooperative ventures are driven more by necessity than by design.

Ideally, to meet the goal of the Strategy, there should be a web of Federal, Tribal, State and local governmental bodies that stay in occasional, regular contact on drinking water issues. Such collaborative efforts are often difficult to keep active. They often require much time and effort of a key individual in one organization to keep the links established and working. This places considerable demands on a key person's time and efforts and is likely to detract from other, more pressing duties. The natural way to meet the goal appears to be through the necessity of making the associations as needed and to utilize existing organizations that are structured to do these things such as the MRWA and the Rural Community Assistance Program (RCAP).

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10. The DHS should take a proactive approach in educating the public with regards to TMF. The AC recommended six ideas in which the DHS could improve public involvement and enlightenment.

The six recommendations from the *Findings* document that are the objectives that define this goal are listed below as italicized and bulleted items with comments on their respective implementation status:

1. *Offering Continuing Education Units (CEUs) for: hands-on field training of system operators; anyone attending management and administration courses; and/or attendance at rules hearings or meeting, meetings on regulations, serving on committees, etc.*

Current Status

Partially implemented and on going.

As training courses are developed and conducted in concert with training organizations such as the Maine Rural Water Association, the Maine Water Utilities Association, and others, Continuing Education Units (CEUs) and Training Contact Hours (TCHs) are offered.

2. *Mailing of an annual rules status update to all water system operators, owners, engineers, etc.*

Current Status

Not implemented and not likely to be.

Interested parties are made aware of proposed State and Federal rule changes through the DWP website, by publication in the legal notices section of state newspapers, by publication in the *Service Connection*, and by notifying stakeholder groups such as the Maine Rural Water Association and the Maine Water Utilities Association. The interested parties then have an opportunity to make comments during public hearings. Direct mailing requires a great deal of staff time better used for other activities and involves a considerable expense in materials. Additionally, direct mail often is not read in a timely manner and may not get to the proper recipients.

3. *An effort to improve management capacity through on-site board member training. Special focus would be placed on long-term planning for the system, financial management and full cost financing for the system, and regulatory environmental and financial controls.*

Current Status

Under development with modification.

The DWP is coordinating with the Maine Rural Water Association and the Maine Municipal Association to offer board member training. The focus of this training will be directed toward the general requirements and rules for legal and effective board member operations. Board members are not always knowledgeable and aware of legal requirements and generally accepted practices for conducting meetings. The training will be offered on a day seminar basis in a group-training venue, and not as individual, on-site trainings.

At a later time the type of training called for in the goal may be offered. Most likely the attempt to offer training directed to board members in financial and regulatory areas will occur in a group training session rather than on-site.

4. *Move toward creating a website that contains current information and links to relevant agencies, sites, etc.*

Current Status

Implemented with ongoing modifications and improvements.

The DWP has a well established website with pages containing all of items called for in the *Findings* document and more. More pages are added as DWP staff members identify items that should be included on a website. The website is updated and modified on an ongoing basis.

5. *Incentives for schools to include water treatment and supply as a curriculum topic*.

Current Status

Not implemented as stated in the goal. Treatment and supply as a curriculum topic for schooling at elementary and secondary school levels is not likely. Rather, the DWP supports education on drinking water topics geared to elementary students at different times of the year. During Drinking Water Week, which occurs annually, the DWP sponsors several activities. A theater group is hired for the occasion by the DWP to give three to four thematically-based shows daily to students from grades one through six. Community water systems are encouraged to educate consumers in their communities on drinking water issues. The Governor signs the Drinking Water Proclamation. The DWP, in concert with other organizations, sponsors the Children's Water Festival, which educates fifth and sixth grade school children on subjects related to drinking water, water protection, and wastewater treatment. The children receive education by engaging in hands-on, entertaining activities. This DWP supported activity occurs annually in both the northern and southern sections of the state.

6. *Requiring consistent definitions of regulations and policies between Federal agencies, State agencies, etc.*

Current Status

Generally implemented as policy and in written communications.

The document, *State of Maine Rules Relating to Drinking Water*, directly references the Federal document, *Title 40 Code of Federal Regulations*, and incorporates its terminology and definitions. Inconsistency appears to occur in verbal communication between DWP staff and the public. A staff member may attempt to answer questions on a subject about which he or she is not very knowledgeable.

11. The overall success of the State's Capacity Development Strategy will depend in part on the Drinking Water Program's acquisition of appropriate financial and personnel resources to design, promote and deliver TMF assistance programs. The CAB proposed ideas on how it could assist in this process.

Item number 11 is a statement of fact or condition rather than a goal to be attained. The Strategy document refers to five specific recommendations as goals that appear in the Findings document. The five recommendations from the Findings document are listed below as italicized and underlined items with comments on their respective implementation status:

Business Planning Guidebook

Current Status

Not implemented.

The recommendations in the Findings document call for the development of a business planning guidebook for *all* public water systems to help them develop business plans. This goal is a very ambitious one that will be challenging and difficult to accomplish. No single model guidebook could be developed to meet the needs of *all* public water systems. The planning needs of a camp, a rural school, a mobile home park, a small water utility and a large water utility are going to vary tremendously. Rather, the DWP should concentrate on supporting aspects of business planning (expense and operational budget forecasting, anticipating growth and expansion, capital improvement planning, etc.) that public water systems can use to their own benefit as they see fit.

Education Campaign for Consumer Confidence Reports

Current Status

Largely implemented.

After the inclusion of the Consumer Confidence Report Rule (CCR Rule) in the 1996 Amendments to the Safe Drinking Water Act, the DWP was proactive in outreach and educating the affected water systems. In October 1998, notification of the CCR rule was mailed to all community water systems in the state of Maine. In December 1998, a roundtable discussion of the requirement of the CCR Rule took place at the annual meeting of the MRWA in Freeport. A direct mailing was sent to all community water systems. In 1999 a series of 5 public meetings sponsored by the MRWA was held in various locations throughout the state for the benefit of the community water systems. A presentation was made at the MWUA annual Trade Show, in

February of 1999. Articles on the subject have appeared yearly in the *Service Connection*, the DWP's bimonthly newsletter, as a reminder of the CCR Rule requirements. The "required test list" contains a reminder of the CCR Rule requirements. At the beginning of each year, since the CCR rule was adopted, the DWP sends out a summary of water test results along with a reminder letter – that the CCR is due by July 1st.

Capital Facilities Management Plans

Current Status

Implemented with modification.

The Findings document calls for Capital Facilities Management Plans (CFMPs) that involve "long-range capital budgets with accurate system inventory processes."[3] The DWP has instituted a Capacity Development Grant Program which provides matching funds for Comprehensive System Facilities Plans (CSFPs) or Master Plans, projected out to a twenty-year period. CSFPs provide a comprehensive analysis of system operations. Included in CSFPs are anticipated capital improvements systems may need to maintain facilities and to meet projected drinking water demand. Water system personnel have stated that long-range budget projection beyond three years is nearly impossible to do reliably. Additionally, one superintendent told this writer that much of his system's budgetary requirements are affected by regulatory changes that affect the system's operations in technical and financial ways.

Programs for TMF Peer Review

Current Status

Implemented to a very limited degree.

The *Findings* report calls for the DWP to establish and financially support "networks for peer review, information exchange, and sharing technical services."[4] To some extent this is occurring. The DWP has staff persons in committee positions with various committees of the Maine Water Utilities Association (MWUA). The MWUA's mission is to encourage mutual aid among water utilities through its association. DWP staff persons serving on these committees assist other committee members in accomplishing the MWUA's mission.

There is the potential for the DWP to be the coordinating agency for water systems of different types and categories to create networks for information exchange and shared services. The Self-Assessment Survey has a section asking respondents if they have an interest in sharing

services, information, purchasing power, and equipment. A number have indicated it is something they are interested in.

Massachusetts-type Model Capacity Assistance Program

Current Status

Partially implemented with variation.

The Massachusetts model calls for selected water systems to be assessed for capacity and to match needy systems with capacity assistance service providers. The DWP will examine the self-assessment surveys to identify the needy systems and then propose to match them with service providers. The DWP funds "circuit rider" positions in the Maine Rural Water Association organization to provide technical assistance to public water systems. The Circuit Riders may receive additional assignments to assist the needy systems once they are identified. The technical part of TMF has been fairly well covered; it is the two areas of financial and managerial capacity that will require more attention in the future.

II. PROGRESS TOWARD IMPROVING THE TECHNICAL, MANAGERIAL AND FINANCIAL CAPACITY OF PUBLIC WATER SYSTEMS

INTRODUCTION

The general goal for each State's Capacity Development Program (Program) is to aid the development and improvement of the technical, managerial and financial (TMF) operations of public drinking water systems. This goal necessitates that the Capacity Development Coordinator work in concert with the various sections within the Drinking Water Program (DWP) and with outside agencies to foster capacity development. Each State Program is encouraged to develop innovative activities to accomplish this goal. States have tried some common approaches and some novel approaches to the task. The following narrative details the actions undertaken by the Maine DWP, it's Capacity Development Program and allied third-party agencies to make progress toward improving capacity development.

DRINKING WATER PROGRAM ACTIVITIES AIDING CAPACITY DEVELOPMENT

1.0 OPERATOR CERTIFICATION

The Maine DWP has an EPA approved Operator Certification Program (Program or Operator Certification). Operator Certification involves several activities related to the licensing and continuing education of water treatment and water distribution operators, commonly referred to as water operators. These major activities support technical and managerial operations.

1.1 Licensing of Water Operators

The Program works in concert with the Board of Licensure of Water Treatment Operators (Board) to set the requirements for the education, examination and continuing education of water operators. The Board is composed of representatives of the water industry and water educational community. The Board in concert with Operator Certification set policy and recommend rule changes pertaining to the licensing of water operators. The mission of Operator Certification is to ensure that persons licensed as public water system operators possess the knowledge, skills, and ability to properly operate and maintain public water systems. This is in direct support of capacity development.

1.2 New Operator Training

New EPA requirements stipulate that all public water systems classified as Community; Non-Transient, Non-Community; and surface water-supplied Transient, Non-Community water systems—746 systems in total—have at least one or two licensed water operator(s) designated as a responsible operator-in-charge after September 30, 2002. This requirement will significantly increase the need for licensed water operators in Maine. An *Expense Reimbursement Grant* is available from the EPA to help fund the training and licensing of water operators.

1.3 Assessing System Compliance for Required Operators

In the spring of 2002 a mailing went out from the DWP to all public water systems requiring licensed operators. Water systems were required to list and name individuals retained as licensed operators by each system and to return the information to the DWP. This activity was instituted to assess each system's compliance in meeting the requirement for an appropriate number of required water operators.

2.0 FIELD SERVICES

The DWP has in its employ four regional engineers and two regional engineering technicians to assess public water system operations and to provide guidance and advice in support of system operations. Field engineers and engineering technicians perform sanitary surveys to determine the technical and operational compliance of public water systems. In written reports directed to the surveyed water systems, field staff state requirements for system compliance and offer recommendations on improving system operations. The staff persons refer system operators to other DWP personnel for assistance to improve capacity. For example, engineers and engineering technicians will make known to system operators the availability of grant and loan activities to improve system operations. Several water systems have been referred to the grant programs by field staff.

3.0 SOURCE WATER PROTECTION

The Source Water Protection Section is involved in activities that support improvements in the areas of technical and managerial operations. This section's activities supporting capacity development include:

3.1 Source Water Assessment Program (SWAP)

The SWAP's mission is to assess existing or potential sources of contamination for each public water system and to make the information known to the public water system, municipal

officials and the general public. The information gained from assessments will be useful for water system personnel and public officials, with public citizen input, to plan for growth, development and other activities with a mind to safeguarding a public water source. The assessment and planning has four key elements: *delineation* of a contributing area of the water source; *inventory* of potential existing or future contaminants; *evaluation* of source water susceptibility to contamination; and *communicating* assessment results to the public. The assessment of a public water source will enable a public water system to develop *management plans* to ensure the safety of the water source and *contingency plans* to address emergency threats to the water source. The SWAP supports technical and managerial improvements in system operations.

3.2 DWP Geographic Information System (GIS)

The GIS section produces maps for communities and public water systems to use for planning purposes and for source protection management. The maps produced are also an integral part of the SWAP. This activity is in direct support of technical capacity.

3.3 New Well Approval

To ensure that well water supplies for public water systems is safe and that wells are properly sited and constructed, the New Well Approval section reviews and approves wells before they go on-line. This activity is in direct support of technical capacity.

3.4 Wellhead Protection Program

Maine's Wellhead Protection Program (Program) is largely a voluntary option for public water systems, but there are incentives for water systems to participate. There are minimal requirements for protection zones around wellheads that systems must meet, but additional activities that more fully protect a larger wellhead zone are optional. The incentive for water systems to engage in greater protection efforts comes from reduced monitoring requirements for those systems demonstrating no contamination threats to the water source and who have a management plan to safeguard the water source. The Program has definitive guidelines and recommendations Wellhead protection is intimately involved in the SWAP and supports technical and managerial capacity.

3.5 Wellhead Protection Grants

Community water systems and non-profit, non-community water systems are eligible for up to $5,000 in grant money to fund activities that enhance wellhead protection for groundwater sources. Grant money is available for items and activities such as wellhead protection plans, fences, locks, security cameras, contaminant inventories, signs identifying a public water source,

professional help in developing protective ordinances, removal of contaminants, and producing educational materials. This activity supports technical and managerial capacity.

3.6 Land Acquisition Loans

Loan money is available through the DWP for the acquisition of land to promote source water protection for community and non-profit, non-community public water systems. Land acquisition loans are part of the Drinking Water State Revolving Fund (DWSRF or SRF) which is jointly administered by the DWP and the Maine Municipal Bond Bank (MMBB). This activity supports technical and managerial capacity.

4.0 DRINKING WATER STATE REVOLVING FUND: CAPITAL CONSTRUCTION LOANS

The Drinking Water State Revolving Fund (DWSRF or SRF) makes loan money available for capital construction projects for community or non-profit, non-community public water systems that will eliminate immediate or potential threats to public health. This funding program is jointly operated by the DWP and the MMBB. Water systems may be eligible for a percentage of the loan package to be structured as principal forgiveness (like a grant) for water systems that serve disadvantaged communities. DWSRF applicants must undergo a capacity review by the Capacity Development Coordinator to determine that the applicant possesses adequate TMF capacity. Capital construction loans improve or guarantee technical capacity and the capacity review analyzes a broad range of technical, managerial and financial operative factors. Systems deemed as lacking adequate capacity will not receive a loan package without undergoing capacity improvements recommended by the DWP. Once capacity is assessed as being adequate, the applicant may be approved for the loan package.

5.0 CAPACITY DEVELOPMENT PROGRAM

The Capacity Development Program is directly involved in assessing the TMF capacity of regulated public water systems and in assisting regulated public water systems to improve their TMF capacity. Several activities under this Program are designed to establish capacity development. The Capacity Development Coordinator perceives the development and improvement of capacity as an educational outreach process that will take several years' time to move regulated systems forward in improving capacity.

5.1 DWSRF Capacity Reviews

As part of the DWSRF Project Construction Loan activity, all applicant systems seeking construction project funding must undergo a capacity development review. The Capacity

Development Coordinator, and usually one of the DWP Field Engineers, meet(s) with the water system superintendent and the lead overseer (usually a chair of the water board) on-site at the utility office or plant. TMF operations are discussed and analyzed. Systems that pass the review may proceed with a loan agreement with the DWSRF Program. Systems found lacking have an opportunity to improve their operations under the advice of the DWP to qualify for a loan agreement. Table one shows the total number of systems reviewed for the years 2001 to 2002 present.

Table 1. Number of applicants undergoing DWSRF construction project capacity reviews

2001

14 water systems were reviewed and approved for DWSRF construction loans

2002

12 water systems were reviewed:

11 approved **1** denied approval and has withdrawn

Appendix A lists the particular systems undergoing DWSRF capacity reviews for 2001 and 2002.

5.2 Capacity Development Grants

The Capacity Development Grant Program (Program) existed for the years 1998 through 2001 for the purpose of providing matching grant money for Comprehensive System Facilities Plans (CSFPs), also known as strategic or master plans. This is a DWSRF activity under the Capacity Development Set-aside. Grants are available for Community and Non-Profit, Non-Community public water systems. Third party professional engineering or consulting firms must produce a document for the grant applicant. The grants are available for 50% of document costs to a maximum amount of $10,000. Grant monies are awarded on a reimbursement basis after a completed document draft is submitted to the DWP for review and approval. Table two indicates the number of grant applicants seeking grant funding for CSFPs during the 1998 to 2001 period.

Table 2. Number of Capacity Development Grant applicants and recipients from 1998 to October 2001

From the Program inception in 1998 to October 2001:

15 eligible community water systems applied for grants;

3 systems withdrew;

12 plans were completed, accepted and reimbursed.

1999

3 Community water systems received approval and payment for completed CSFPs

2000

5 Community water systems received approval and payment for completed CSFPs

2001

4 Community water systems received approval and payment for completed CSFPs

In early 2002 the Program was reinstated and expanded to cover a variety of planning, analysis or engineering studies for eligible Community and Non-Profit, Non-Community water systems. The award amount per plan remained at 50% of cost to a maximum of $10,000. The allowable planning or engineering studies included:

- Comprehensive System Facilities Plans
- Capital Improvement Plans
- System Hydraulic Modeling Studies/Reports
- Comprehensive Operations and Maintenance Manuals
- System Vulnerability Assessments
- Emergency Response Plans
- Management Review Studies/Reports
- Planning Software Designed for Improving System Operations
- Engineering Studies for New or Supplemental Water Sources
- Engineering Studies for Improved Water Treatment Operations
- Other professionally prepared documents that enhance system capacity, as determined by the DWP

Table 3. Number of current applicants for Capacity Development Grants for 2002.

2002
As of the current date:
15 Community water systems have applied
13 applications have been approved for plans and studies
1 application is under review
1 application was rejected as ineligible
0 plans or studies have been produced and submitted for review and approval

Appendix B lists the particular systems and their associated project activities that have been approved or are under review.

5.3 Self-Assessment Surveys

The Strategy calls for the development of self-assessment surveys for all regulated public systems. This will require the development of a series of self-assessment surveys targeted to the various types of public water systems:

- PUC-regulated Community water systems (water utilities)
- Community water systems (mobile home parks, housing associations, nursing homes)
- Non-Transient, Non-Community water systems (schools, factories, businesses)
- Transient, Non-Community water systems (camps, motels, hotels, restaurants)

Currently, 153 PUC-regulated Community water systems have received the first of the surveys to be produced. As of the current date, 119 water systems have returned completed surveys. The Maine Rural Water Association Technical Assistance Providers will attempt to get the non-responding systems to complete and return the surveys.

Those water system personnel who have spoken with the Capacity Development Coordinator have indicated that they felt the self-assessment was a worthwhile exercise and made them actively consider their operations and how they might be improved or redirected.

Extracting usable information from the surveys to provide a broad base of useful categorical information will be the most difficult challenge.

5.4 Training Outreach

Communication is a key to providing TMF capacity assistance. Some of this assistance can be provided through written communications with limited effectiveness, and some can be provided by personal communication with considerable effectiveness but low efficiency.

A future role for the Capacity Development Program will be providing formal educational outreach to water systems and their personnel. Currently under consideration and in the beginning phase of development is a class on Board Member Training to be provided to water system overseers. Engaged in preliminary talks are the DWP, the Maine Rural Water Association and the Maine Municipal Association. Tentative target dates of November, January and March have been selected as the desired time to offer the training to those governing boards or organizations involved in water system operations.

It is anticipated that additional training sessions will be held to address other capacity-related subjects.

5.5 New System Permitting

The 1996 Amendments to the Safe Drinking Water Act require that all new community and Non-Transient, Non-Community public water systems commencing operations after October

1, 1999 must receive a permit to produce and distribute drinking water. Maine issues a General Operations Permit (Permit) for those new systems. Before the Permit is issued the applying system must submit materials demonstrating that it possesses adequate capacity in each of the three areas of TMF operations. Once the DWP is satisfied that adequate capacity exists to support the water system, a General Operations Permit is issued and the system can become fully operational.

Maine's New System Permitting activity got off to a late start and four systems were permitted after the fact. New System Permitting got well under way in July 2001. Tables 4, 5 and 6 show the numbers of New System Permit applicants for the years 2001 to the present date in 2002.

Table 4. Status of General Operations Permit applicants for 2001

2001
7 Community water systems applied for permitting
7 Non-Transient, Non-Community water systems applied for permitting
4 of the 7 Non-Transient, Non-Community water systems received permits

Table 5. Status of 2001 General Operations Permit applicants in 2002

From 2001 to 2002
2 Community water systems applying in 2001 received permits in 2002
3 Non-Transient, Non-Community water systems applying in 2001are pending in 2002
4 Community water systems applying in 2001 are pending in 2002
1 Community water systems applying in 2001 has been withdrawn in 2002; system connected to municipal water system

Table 6. Status of General Operations Permit applicants in 2002

2002
3 Non-Transient, Non-Community water systems applied for permitting

CAPACITY DEVELOPMENT ACTIVITIES OF OTHER ORGANIZATIONS

The Maine Drinking Water State Revolving Fund (DWSRF) receives Federal money appropriated by Congress and matched by a State Legislative appropriation to make money available for: Construction project loans, grant activities undertaken by sections within the DWP, and to help fund third-party activities that generally promote safe drinking water. Two third-party organizations receive assistance funding under the DWSRF 2% Technical Assistance Set-aside. They are the Maine Rural Water Association (MRWA) and the Maine Water Utilities Association (MWUA).

6.0 MAINE RURAL WATER ASSOCIATION Technical Assistance Water Quality Specialists

The MRWA has two Water Quality Specialist positions, commonly called "Circuit Riders," who provide direct technical service to small water systems. The Circuit Riders make direct visits to regulated water systems. They provide education to new water system owners about drinking water regulations and testing requirements; assist in developing sampling plans and in gathering samples; help provide public notification of water quality problems for affected systems; assist systems in applying for Phase II/V waivers; assess water systems for being under the direct influence of ground water; provide technical assistance on chemical dosages and operation of treatment equipment; perform leak detection and assist with line location and repiping; and generally serve as a liaison between the DWP and regulated systems. Their efforts directly assist in maintaining and improving technical and managerial operations.

7.0 MAINE WATER UTILITIES ASSOCIATION Small System Technical Assistance

The MWUA (Association) is an association of water systems allied to provide mutual aid through the sharing of information and resources. Under the 2% Technical Assistance Set-aside, MWUA receives money to provide education and training for water system personnel. The venues for education and training vary. MWUA activities promote all aspects of capacity development through training.

7.1 Statewide Training

Statewide training is available on a number of topics that provide classes on subjects directly involved in water operations. Classes cover subjects such as computer applications for utility management; water resource management; drought issues; new developments in rule changes and associated management issues; and other subjects. Set-aside money covers trainer fees, set-up costs and administrative expenses.

7.2 Bimonthly Meetings

Four of the six bimonthly meetings of the Association have time set aside for the education of attending members. DWSRF money covers speaker fees, set-up expenses and other administrative costs.

7.3 Small System Targeted Training

This area of activity is devoted to the development and dissemination of training aids directed toward small systems (serving populations under 10,000). The MWUA develops and mails a newsletter with articles devoted to system operations. The Association also mails American Water Works Association (AWWA) materials specifically developed for small system operations to the approximately 400 community water systems.

7.4 Mutual Aid Network

The Mutual Aid Network is designed to encourage the transfer of knowledge and experience of large system operators to the small system operators. The Education and Operations Committee of the MWUA is involved in the development of educational programs to make small systems aware of impending rules. Groundwater systems face these new regulations: the Groundwater Rule, the Radionuclides Rule, the Arsenic Rule and the Radon Rule. Surface water systems face these regulations: the Disinfectant/Disinfection By-Product Rule and the Surface Water Treatment Rules. The MWUA has been instrumental in providing education and training on the substance and anticipated effects of the foregoing rules.

7.5 MWUA Committees

The MWUA has eight committees that are the "workhorses" of the Association. The Committees are comprised of water system personnel, DWP employees and other Association members who have knowledge and experience of water operations and regulatory controls. Committee operations promote the interests, education and training of water utility personnel. The committees include: Education and Operations, Legislative, By-Laws, Program, Regulatory Liaison, Water Resources, Public Awareness and Nominating.

CONCLUSION AND RECOMMENDATIONS

Strategy Implementation

Implementation of the Strategy will proceed at a varied pace for most of the goals. The role of capacity development in the near future will be split along three major lines of activity: DWSRF capacity reviews, new system permitting, and educational outreach. The Strategy goals that relate to these three activities are likely to be the ones to receive the quickest and most complete implementation. They will most directly complement and support the activities of the Capacity Development Program.

Even though the goals are broadly stated and fairly ambitious in reach, they provide a good basis for guiding the Capacity Development Program. Some of the goals outlined in Maine's Strategy are common to other States' Strategies and exhibit common threads of ideas and approaches to foster capacity development. The difficulty associated with enacting broad-based goals is the bedeviling details that have to be developed for specific program objectives that fulfill the strategic aims. It is most unlikely that the goals will be met in the original implementation schedule.

The following goals will receive primary attention:

2. Development of self-assessment tools for regulated drinking water systems.
12. Development of enhanced sanitary surveys.
3. Provide training for water system personnel in fiscal capacity and financial management.
4. Train DWP staff in TMF elements.
7. Provide early notification of rule changes.

The following goals will receive secondary attention:

5. Enforce water meter requirements.
6. Ensure that communities are considering Public Water System issues in community planning.
9. Encourage cooperation among state agencies and between federal, tribal and local governments on drinking water issues.
10. Educate the public on TMF issues.

The following goals will receive tertiary attention:

11. Make useful appropriation of financial and personnel resources to TMF assistance.

12. Use third-party studies to show the benefits of, and encourage the development of, the consolidation of multiple drinking water systems into single entities.

Progress Toward Improving TMF Capacity

The existing structures and activities detailed in the report that enable progress toward capacity development will remain as they are. These are natural organizational and active approaches that lend themselves well to enhancing capacity development. Likely, the only development in the near future that will alter this process to any degree will be the inclusion of more participants—individuals or organizations—in the process.

DEFINITIONS

AC: This advisory group is composed of drinking water stakeholders from both the public and private sectors and was created to provide DHS with recommendations in formulating a Capacity Development Strategy for the State of Maine.

Capacity: Refers to the capabilities required of a public water system in order to achieve and maintain compliance with the drinking water rules. It has three elements:

Technical: Technical capacity or capability means that the water system meets standards of engineering and structural integrity necessary to serve customer needs. Technically capable water systems are constructed, operated, and maintained according to accepted standards.

Financial: Financial capacity or capability means that the water system can raise and properly manage the money it needs to operate efficiently over the long term.

Managerial: Managerial capacity or capability means that the water system's management structure is capable of providing proper stewardship of the system. Governing boards or authorities are actively involved in oversight of system operations.

CCR: Consumer Confidence Report – An annual water quality report required by the 1996 SDWA amendments, which summarizes information on source water, levels of any detected contaminants, compliance with drinking water rules, and educational material.

DHS: Department of Human Services – This agency is responsible for administering the drinking water standards in Maine through a primacy agreement with US EPA.

DWP: Drinking Water Program – the agency within the Division of Health Engineering in the Bureau of Health of the Department of Human Services that has the primary responsibility to administer and enforce the requirements of the SDWA.

DWSRF: Drinking Water State Revolving Loan Fund – Congress authorized this fund in 1996. The Maine Department of Human Services administers the DWSRF in concert with the Maine Municipal Bond Bank.

MMA: Maine Municipal Association – an association of Maine municipalities with the mission to promote and strengthen local government.

MRWA: Maine Rural Water Association – a not-for-profit organization largely devoted to providing technical assistance and educational training to small public water systems.

MWUA: Maine Water Utilities Association – an association of water utility personnel allied to provide mutual aid through the sharing of information and resources.

Program: A managerial subsection within the Drinking Water Program. Programs are activities occurring under sections that execute distinct tasks in support of the SDWA. The Capacity Development Program is a subsection within the SRF Section.

PUC: Public Utilities Commission – This State agency has regulatory responsibility for many drinking water systems that are privately owned and operated.

RCAP: Rural Community Assistance Program – a not-for-profit organization that provides technical assistance services and training for rural communities on drinking water and wastewater systems as well as other environmental, housing, economic and planning activities.

Section: A managerial subdivision of the Drinking Water Program responsible for the administration of a particular aspect of the SDWA. The DWP is subdivided into several sections.

SDWA: The Safe Drinking Water Act – Passed by the US Congress in 1974 and amended in 1986 and 1996. The SDWA seeks to safeguard the nation's drinking water supplies and to assure that the nation's consumers have safe drinking water.

SRF: State Revolving Fund – an abbreviation of the abbreviation of DWSRF.

SWAP: Source Water Assessment Program – a program within the Source Water Section devoted to assisting drinking water suppliers to protect and manage drinking water sources.

TMF: Technical, Managerial and Financial – This abbreviation is used to save space in the report and avoid frequent repetition of these terms, defined previously as capacity.

US EPA: US Environmental Protection Agency – This federal agency oversees State primacy programs and provides financial support. One of US EPA's functions is to determine when a State's capacity development program is in compliance with the Safe Drinking Water Act.

ENDNOTES

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[1] David Bois, *A Strategy for Improving the Financial, Technical and Managerial Capacity of Maine's Public Drinking Water Systems,* State of Maine Department of Human Services, Drinking Water Program, Augusta, ME, September, 2000, pp 4 – 7.

[2] William Johnson, *Capacity Development Technical, Managerial and Financial Self-Assessment for Community Water Systems*, State of Maine Department of Human Services, Drinking Water Program, Augusta, ME, March, 2002. p 2.

[3] David Bois, *REPORT OF FINDINGS ON IMPROVING THE TECHNICAL, MANAGERIAL AND FINANCIAL CAPACITY OF MAINE'S PUBLIC WATER SYSTEMS*, Capacity Development Workgroup to the Maine Department of Human Services, Augusta, ME, p 26.

[4] David Bois, *REPORT OF FINDINGS ON IMPROVING THE TECHNICAL, MANAGERIAL AND FINANCIAL CAPACITY OF MAINE'S PUBLIC WATER SYSTEMS*, Capacity Development Workgroup to the Maine Department of Human Services, Augusta, ME, p 26.

Appendix A.

Status of DWSRF capital construction project applicants for the years 2001 and 2002

	DWSRF Capacity Development Reviews		
	YEAR 2001		
	Approval Date	**Public Water System Name**	**PWSID #**
1	24-May	Moscow Water District	91050
2	29-May	Sabattus Sanitary District	91580
3	19-Jun	Hampden Water District	90660
4	10-Jul	South Berwick Water District	91470
5	11-Jul	CMWC--Hartland Division	90680
6	11-Jul	CMWC--Kezar Falls Division	90770
7	25-Jul	Monmouth Water Association	91020
8	3-Aug	Auburn Water District	90070
9	17-Aug	Searsport Water District	91440
10	11-Oct	Newport Water District	91100
11	8-Nov	Passamaquoddy Water District	90510
13	11-Dec	Bar Harbor Water Co./Bar Harbor Water Dept.	90120
14	12-Dec	Bethel Water District	90160
	YEAR 2002		
	Approval Date		
15	25-Jan	Madawaska Water District	90920
17	15-Feb	Biddeford and Saco Water Company	90170
18	11-Mar	Castine Water Department	90330
19	29-Apr	Bath Water District	90130
20	23-May	Presque Isle Water District	90130
21	28-May	Long Pond Water District	90890
12	17-Jun	North Haven Water Department	91130
22	21-Jun	Winter Harbor Water District	91630
23	28-Jun	Mount Blue Standard Water District	91260
24	5-Aug	Winterport Water District	91640
25	30-Aug	Milo Water District	91000
	Unapproved		
16	reviewed Jan-02	Island Falls Water Department	90720

Appendix B.

2002 approved Capacity Development Grant applications

CAPACITY DEVELOPMENT GRANTS--2002	
Water System	**Proposed use of grant funds**
Kimball Lake Shores Water Cooperative	Comprehensive System Facilities Plan
Knights Hill Association, Inc.	Capital Improvement Plan
Lake Auburn Watershed Protection Commission	Emergency Action Plan
Hancock Village MHP	Comprehensive System Facilities Plan
Bath Water District	Infrastructure planning--basemap construction, Arcview, AutoCAD, CYBERNET software, and training for software use.
New Portland Water District	Engineering study for new or supplemental water source
North Haven Water Department	Comprehensive System Facilities Plan
Lake Arrowhead Community	Comprehensive System Facilities Plan
Tenants Harbor Water District	Comprehensive Vulnerability Assessment
Bangor Water District	Interconnection Study--Mutual Aid
Guilford/Sangerville Water District	Comprehensive System Facilities Plan
Berwick Water District	Disinfection Byproducts Removal Study
Vinalhaven Water District	Capital Improvement Plan

2002 Capacity Development Grant applications under review

CAPACITY DEVELOPMENT GRANTS--2002	
Water System	**Proposed use of grant funds**
Ashland Water & Sewer District	Comprehensive System Facilities Plan

Appendix C.

New System General Operations Permits for 2001 and 2002

Facility Name	PWSID #	Permit Status or Date of Issue
YEAR 2001		
ECJ Hydro (NTNC)	94727	28-Aug-01
Raymond Elementary School (NTNC)	94729	11-Dec-01
MBNA Lincolnville Central School (NTNC)	94738	28-Aug-01
Birchbay Village (CWS)	92357	Under review
Edgecomb Eddy School (NTNC)	25958	Under review
Jennings Project (CWS)	92358	Under review
New Hebron Elementary School (NTNC)	25959	Under review
Jordan Bay Place (CWS)	92353	Project withdrawn
Tenants Harbor Water District (CWS)	92335	17-Apr-02
Bucks Harbor (CWS)	92340	On hold
Tri County Mental Health Services (NTNC)	94743	21-Nov-01
Common House at Two Echo Cohousing Community (CWS)	94752	On hold
Summit Environmental (Renbro, Inc. warehouse) (NTNC)	94751	Under review
Oquossoc Standard Water District (CWS)	92361	8-Jan-02
YEAR 2002		
White Rock Distilleries (NTNC)	94761	Under review
Sabre Corporation Sabre Yacht Facility (NTNC)	10094318	Under review
Dayken Pallet Company (NTNC)	94757	Under review